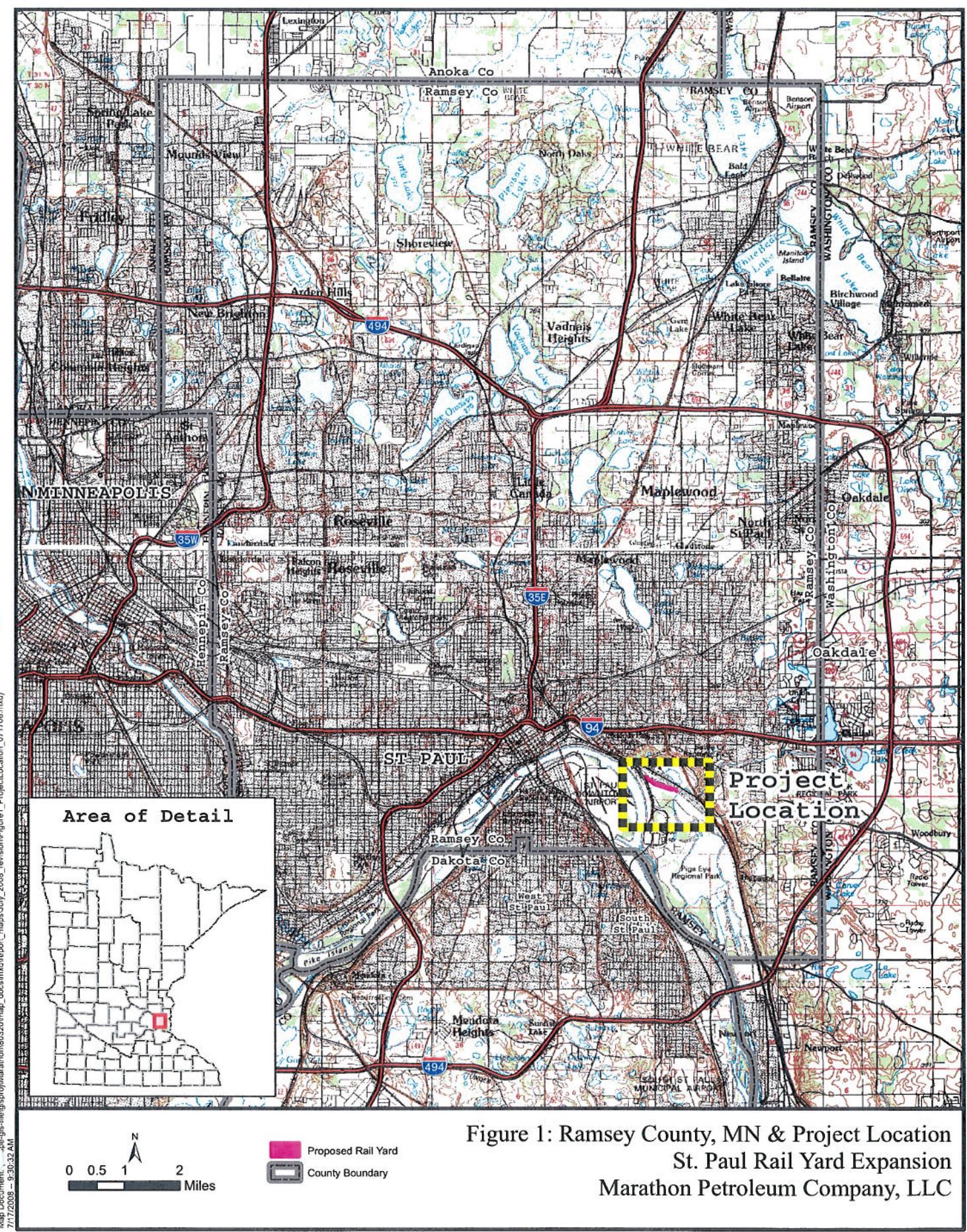


Miscellaneous information and figures



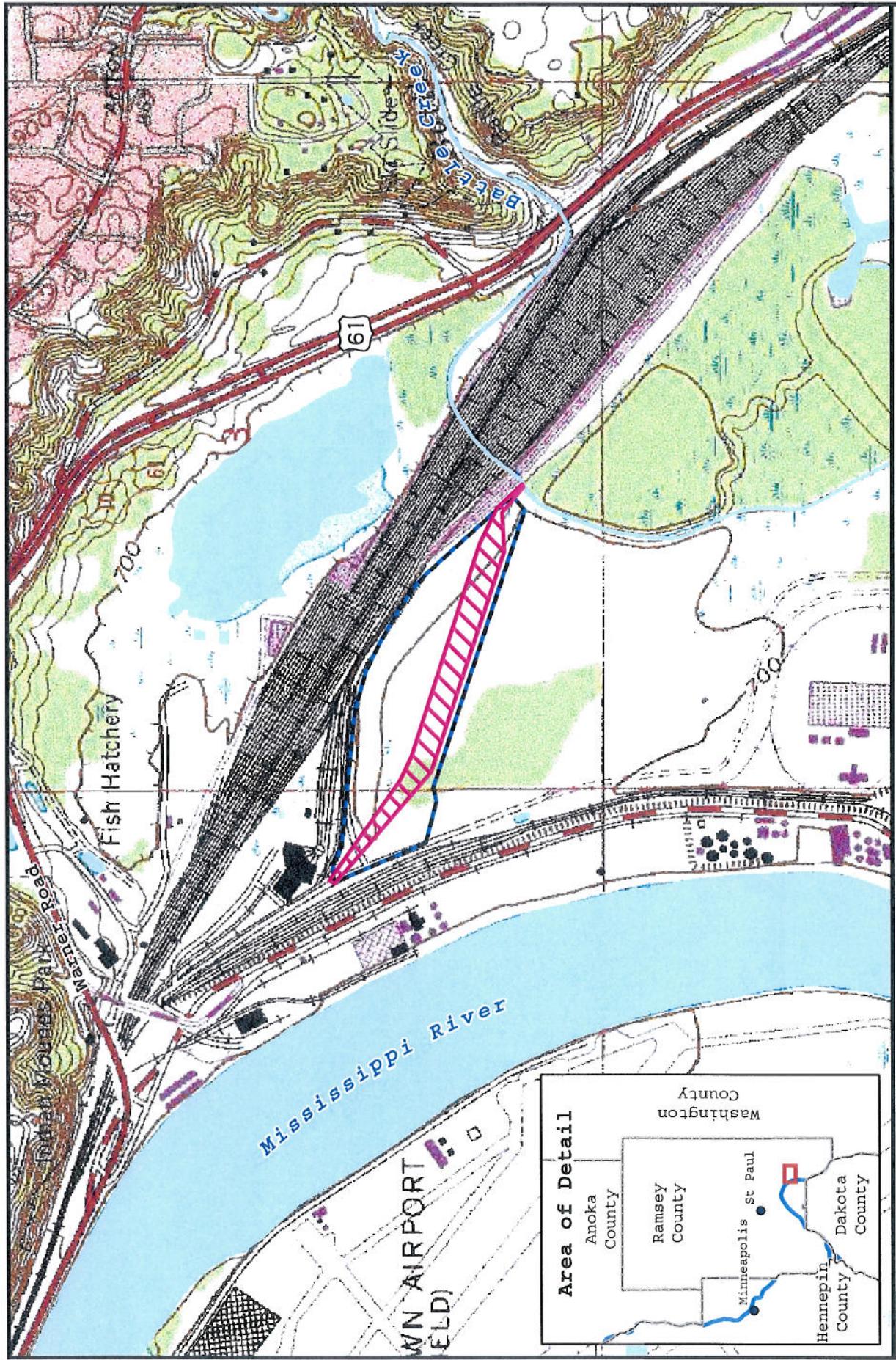


Figure 2: Project Area
St. Paul Rail Yard Expansion
Marathon Petroleum Company, LLC

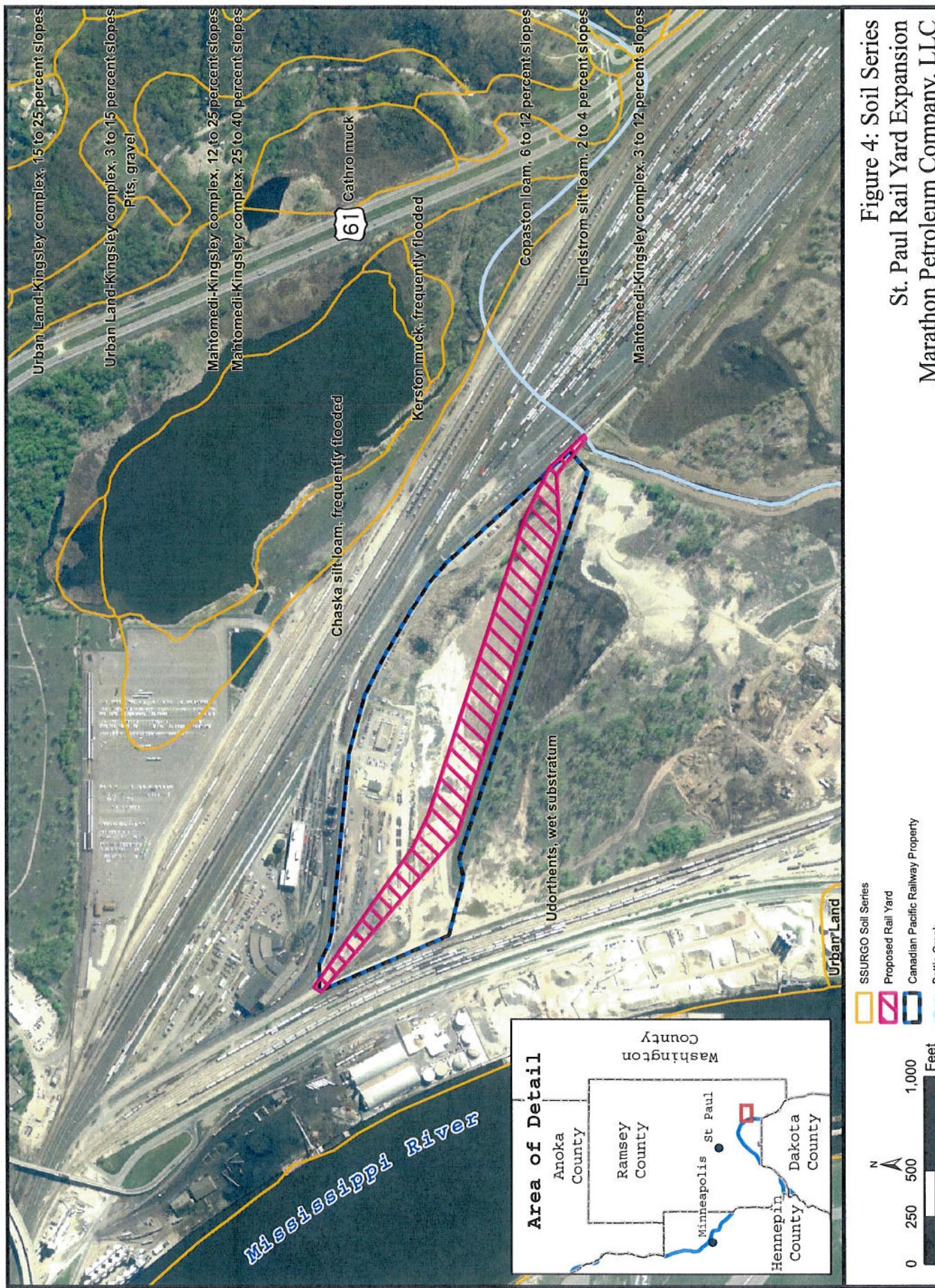


Figure 4: Soil Series
St. Paul Rail Yard Expansion
Marathon Petroleum Company, LLC

SPECIFICATIONS for 2004 – 2008 Fill

For the Supply, Delivery and Placement of Backfill Soils by the City of St. Paul

(Canadian Pacific Railway – Pig's Eye Dump Project)

Under the Excavation and Remediation Agreement, the City is required to "supply, deliver and place" clean and suitable fill in the excavated area of the CPR-owned Dump property. This means that the City will (1) obtain the fill, (2) deliver or arrange for delivery of the fill to the Dump property, and (3) annually spread and compact the fill in the excavation, accomplishing such work at least by October 1 each year.

- Soils must be substantially free of any salvaged or recycled materials including, but not limited to, bituminous pavement, concrete, demolition debris, glass, brick or wood.
- The soils supplied, delivered, and placed by the City shall meet the classification requirements of A-6 materials or better (with A-1 being the best) as defined by the American Association of State Highway Officials Soils Classification System. The American Association of State Highway Officials Soils Classification System is attached to this document.
- Soils must be substantially free of evidence of chemical impacts as determined by visual and olfactory criteria.
- Soils must not contain free-draining water.
- Soils must be substantially free of asbestos-containing material.
- Soils must be substantially free of peat, organic matter, or putrescible matter
- Sufficient soils will be provided to bring the excavation to a final elevation of 701 feet above mean sea level ("AMSL").
- All fill material from the geotextile fabric (697 feet AMSL) to the final elevation of 701 feet AMSL shall be compacted in individual lifts no greater than 6 inches in thickness.
- Compaction shall be accomplished using a vibratory compactor (or like equipment) over each individual lift, and shall meet a performance specification of 90% compaction for the top two and a half ($2 \frac{1}{2}$) feet of fill measured from the final elevation. The City shall use its best efforts to meet the performance specification of 90% compaction for the lower one and a half ($1 \frac{1}{2}$) feet of fill directly overlaying the geotextile fabric and refuse.
- Soils will be placed in sections, each section being brought to the final elevation of 701 feet AMSL before a new section is started. Prior to initial delivery of soils, CPR shall

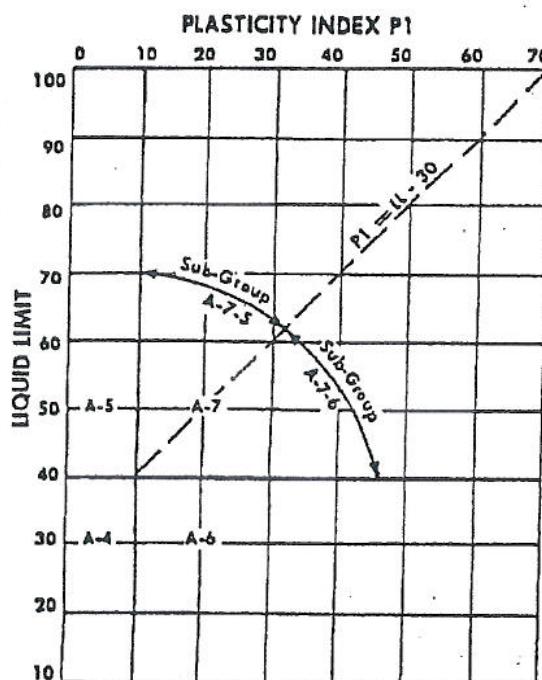
AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS SOILS CLASSIFICATION SYSTEM

Classification of Soils and Soil-Aggregate Mixtures

General Classification	Granular Materials (35% or less passing No. 200)							Silt-Clay Materials (More than 35% passing No. 200)			
	A-1		A-3	A-2				A-4	A-5	A-6	A-7
Group Classification	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5, A-7-6
Sieve Analysis, Percent passing:											
No. 10 (2.00 mm)	50 max.	....		....	....	....	....	....	....	....	....
No. 40 (0.425 mm)	30 max.	50 max.	51 min.	35 max.	35 max.	35 max.	35 max.	36 min.	36 min.	36 min.	36 min.
No. 200 (0.075 mm)	15 max.	25 max.	10 max.	.....	.....	.....	.....	.....	.....	.....	.....
Characteristics of Fraction passing No. 40 (0.425 mm)	....	....		40 max.	41 min.	40 max.	41 min.	40 max.	41 min.	40 max.	41 min.
Liquid limit	6 max.	....	N.P.	10 max.	10 max.	11 min.	11 min.	10 max.	10 max.	11 min.	11 min.
Plasticity index .....	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....
Usual Types of Significant Constituent Materials	Stone Fragments, Gravel and Sand	Fine Sand		Silty or Clayey Gravel and Sand				Silty Soils		Clayey Soils	
General Rating as Subgrade	Excellent to Good							Fair to Poor			

The placing of A-3 before A-2 is necessary in the "left to right elimination process" and does not indicate superiority of A-3 over A-2.

Plasticity Index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity Index of A-7-6 subgroup is greater than LL minus 30.



Liquid Limit and Plasticity Index Ranges for the A-4, A-5, A-6 and A-7 Subgroups

Definitions of Gravel, Sand, and Silt-Clay

The terms "gravel," "coarse sand," "fine sand," and "silt-clay," as determinable from the minimum test data required in this classification arrangement and as used in subsequent word descriptions, are defined as follows:

GRAVEL—Material passing sieve with 3-in. square openings and retained on the No. 10 sieve.

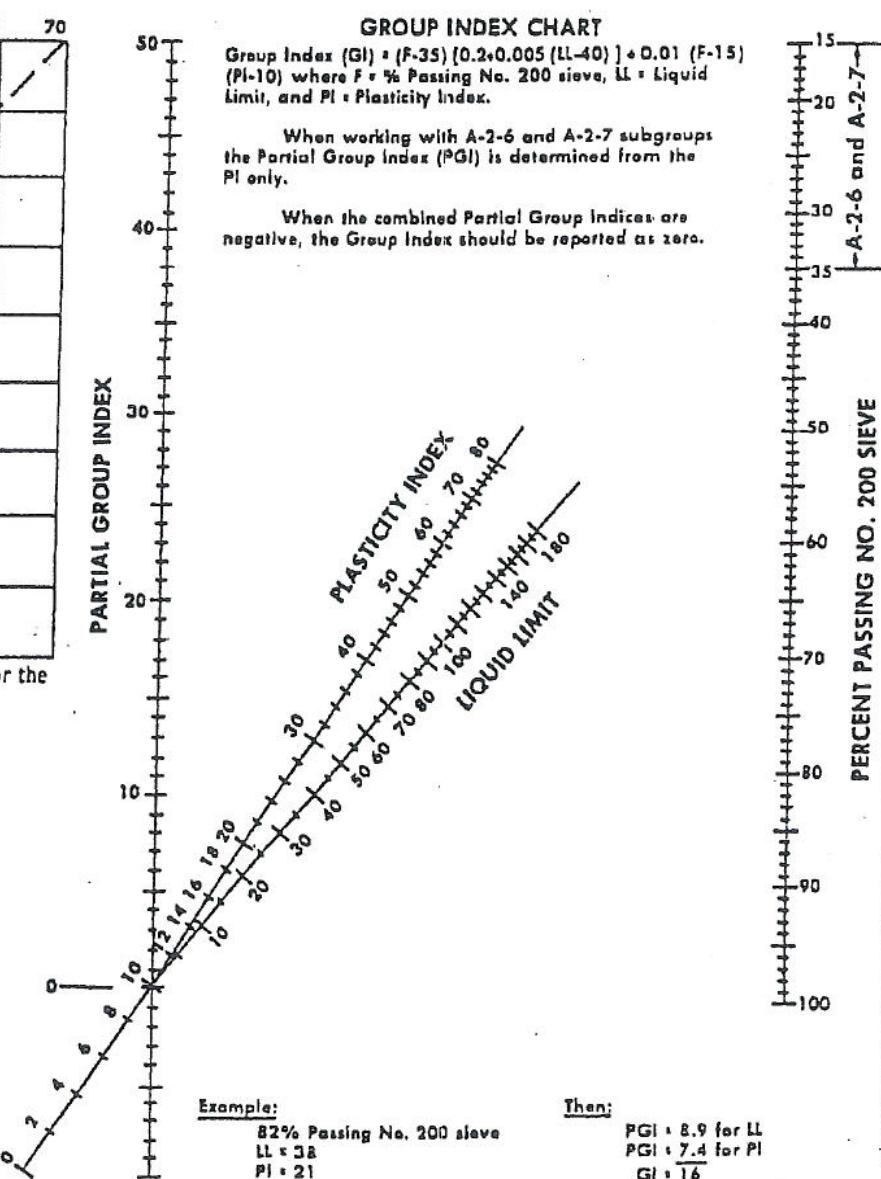
COARSE SAND—Material passing the No. 10 sieve and retained on the No. 40 sieve.

FINE SAND—Material passing the No. 40 sieve and retained on the No. 200 sieve.

COMBINED SILT AND CLAY—Material passing the No. 200 sieve.

BOULDERS (retained on 3-in. sieve) should be excluded from the portion of the sample to which the classification is applied, but the percentage of such material, if any, in the sample should be recorded.

The term "silty" is applied to fine material having plasticity index of 10 or less and the term "clayey" is applied to fine material having plasticity index of 11 or greater.



Example:

82% Passing No. 200 sieve
LL = 38
PI = 21

Then:

PGI = 8.9 for LL
PGI = 7.4 for PI
GI = 16